1: LESSON PLAN - Nmbr9

LEARNING AIMS	Students will: • Engage in cooperative play • Reflect on their own logical and spatial reasoning • Gain a basic understanding of game mechanics, rules, fundamental gameplay, scoring, strategies, cooperative principles, increase mental math skills, number sense skills • Logical reasoning: Exploring the game to learn how to place pieces on different levels (good, legal moves) (W1) • Spatial reasoning: Tactilizing with the tiles to figure out how to place tiles and how to fit tiles together – getting to know the game (W1)
MATERIALS	 Enough copies of Nmbr9 for your class (3-4 students per game) Nmbr9 Scorecard (one per student) Condensed rules sheet - Nmbr9 How to Play
SPECIAL CONSIDERATIONS	 Could introduce game through modelling the game (ELL learners) Could have the instructions in picture formats (simplified instructions) One round of Nmbr9 game play takes approximately 20 minutes. Organize groups according to student needs: Play in pairs, so two on two. Encourage discussion and understanding of the game rules.
LESSON ACTIVITIES	 Today, we're going to play a new game! It's called Nmbr9 and this is what the box looks like [show box]. Have you seen it? Heard of it? Played it? From looking at the box, what do you think the game about? All the other games you've played, except for Qwirkle, were played on a grid with all the other players. This game is different because you create your own game board as each turn happens. Let's watch a video to learn about the game pieces and turns: NMBR 9 How to Play Video. Ask some questions to gauge understanding of the rules: What happens at the beginning of each turn? How do you make a legal tile placement on the same level as other tiles? [has to be adjacent, or touching sides] How do you make a legal tile placement on a higher level? [cover more than 1 tile, adjacent to other tiles on level]How do you How do you score? [0 points for tiles on the table, multiply number of level number above that] To keep track of your score, use the Scorecard. It's best to write down the number you play each turn, on the row of the level that you played on. I'd like you to think about how you are exploring the game today and figuring out how to make legal moves. With your partner, touch and move the number tiles around till you find a good placement. Explore which tiles fit together well and which tiles are hard to place!

- 2. Divide students into groups with two pairs. [As they learn how to make moves, it's great to play as a pair. In later weeks, they could play individually.]
 - a. Explore pieces, read rules that come with the game
 - b. One on one group engagement for questions and clarifications
 - c. Once students feel comfortable, they may start an official round.
- Teacher circulates and prompts student discussion of strategies.
 Encourage students to ask each other the questions listed on the "How to Play" sheet (see below).
 - a. Why did you choose to place that piece there?
 - b. Could you have tried a different strategy?
 - c. How many points did that move give you?
- 4. Hand out the reflection sheet so students know what questions to think about. Encourage them to choose one round of the game and answer the questions (could get through 2 rounds in one class).

QUESTIONS/ REFLECTIONS

Questions for students/prompts:

Focus for Week 1:

- Which numbers fit together well with no gaps? What are pairs of well-matched pieces?
- Which pieces were difficult to place?
- Is your strategy for fitting the tiles changing? Did you physically rotate or shift? Did you use the squares to help? Did you visualize?
- What is your strategy to have the least gaps?
- Did you have a good hint for another player who wasn't sure where to place his/her piece?
- How did you decide to start the next level?
- How many pieces did you have to place on Level 0 (table) before you could add your first Level 1 piece?
- How would it change the game if the tiles were double sided and you could flip them?

"For Next Time" Reflection Question:

How are you going to place your pieces next time to increase your score from today's score?

Other questions to consider:

- How are you going to obtain the most points?
- Did the player with the highest level get the most points?

- What strategy did you use to get the most amount of points?
- How are your individual boards the same? How are they different?
- What was the most challenging part of this game?
- If you could make one change to the game, what would it be? Why?
- How many levels do you think is the maximum someone could get to for this game?
- BEFORE YOU TALLY POINTS: Compare your game board to your neighbour. Estimate who won.
- You get to design a new piece for number 10, what would you design?